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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,450	03/04/2002	Thomas A. Chodacki	57,097 (72011)	3289
21874	7590	04/01/2004	EXAMINER	
EDWARDS & ANGELL, LLP			JEFFERY, JOHN A	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	
			3742	

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,450

Applicant(s)

CHODACKI ET AL.

Examiner

John A. Jeffery

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☒ Claim(s) 29 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20031120.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 8, 10, and 20 are rejected under 35 USC 102(b) as being anticipated by Donnelly et al (US 4,925,386). Donnelly et al (US 4,925,386) discloses an igniter control system comprising igniter 26 switched by triacs Q1, Q2. According to col. 11, lines 27-43, full line voltage is initially applied to rapidly heat the igniter to ignition temperature, and then the voltage is reduced by duty cycling to maintain ignition temperature. See also col. 20, lines 1-28.

Joint Inventors--Common Ownership Presumed

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligations under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-7, 11-17, 19, 21-26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable Donnelly et al (US 4,925,386) in view of Donnelly et al (US6521869). The claims differ from Donnelly et al (US 4,925,386) in calling for a power source voltage measuring device coupled to the control device to determine the full-on time period based on the measured voltage. Providing an igniter control system that measures power source voltage to determine the corresponding igniter on-time is conventional and well known in the art as evidenced by Donnelly et al (US6521869) noting col. 3, line 45 - col. 4, line 4. In Donnelly et al (US6521869), a microprocessor M1 measures line voltage (col. 3, lines 50-52) and selects a switching sequence depending on the voltage value from a look-up table. Specifically, the igniter on-time increases as the voltage level decreases. Col. 4, lines 61-69. In view of Donnelly et al (US6521869), it would have been obvious to one of ordinary skill in the art to provide a microprocessor that selects an appropriate on-time responsive to measured power

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source voltage in Donnelly et al (US 4,925,386) so that the igniter is adequately warmed up and is energized according to the actual power source voltage level.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Donnelly et al (US 4,925,386) in view of Geary (US 4,935,606). The claim differs from the previously cited prior art in calling for duty cycling in half-wave cycle increments. But duty cycling in half-wave increments for power reduction is well known in the art as evidenced by Geary (US 4,935,606) who provides a half-wave rectifier that duty cycles the second voltage in col. 6, lines 14-16. In view of Geary (US 4,935,606), it would have been obvious to one of ordinary skill in the art to duty cycle in half-wave increments in the previously described apparatus to automatically reduce power consumption.

Claims 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donnelly et al (US 4,925,386) in view of Donnelly et al (US6521869) and further in view of Geary (US 4,935,606). The claims differ from the previously cited prior art in calling for duty cycling in half-wave cycle increments. But duty cycling in half-wave increments for power reduction is well known in the art as evidenced by Geary (US 4,935,606) who provides a half-wave rectifier that duty cycles the second voltage in col. 6, lines 14-16. In view of Geary (US 4,935,606), it would have been obvious to one of ordinary skill in the art to duty cycle in half-wave increments in the previously described apparatus to automatically reduce power consumption.

Allowable Subject Matter

Claims 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited prior art when responding to this action. US 205 discloses an igniter control system relevant to the instant invention.

Response to Arguments

Applicant's arguments have been considered but are deemed to be moot in view of the new grounds of rejection.

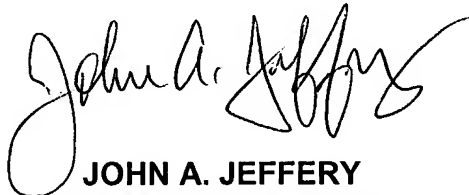
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Jeffery whose telephone number is (703) 306-4601. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Pothier, can be reached on (703) 308-0993. All faxes should be sent to the centralized fax number at (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

A handwritten signature in black ink, appearing to read "John A. Jeffery", with a stylized, cursive script.

**JOHN A. JEFFERY
PRIMARY EXAMINER**

3/29/04